ABSTRACT

A method for manufacturing a single stone into a regular dodecahedral ornament or a regular icosahedral ornament, and the ornament manufactured according to the method are provided. The method enables the ornament to be manufactured at low costs with ease without using a complicated, numerically computer-controlled shaping machine.

The geometric features determining the faces and ridges

of a regular dodecahedron or a regular icosahedron are drawn

as cutting base lines on each surface of a cubic workpiece. On

a face formed by cutting based on the cutting base lines, new

auxiliary cutting lines are sequentially drawn by marking.

Then, based on these auxiliary cutting lines and the remaining

cutting base lines, a possible cut face is determined, which

is in turn cut using a cutting tool. The cutting base lines

which are erased after each cutting are complemented by

auxiliary cutting lines to find a new possible cut face, which

is in turn cut in sequence, thereby manufacturing the regular

polyhedral ornament.